

Amendments to the Specification:

- 1) Please replace the title at pages 1 and 65 with the following amended title:

MAMMALIAN RECEPTOR PROTEINS; RELATED REAGENTS AND METHODS
MAMMALIAN RECEPTOR PROTEIN DCRS5; METHODS OF TREATMENT

- 2) Please replace paragraph [0001] at page 1 with the following amended paragraph:

[0001] This filing is a Continuation-In-Part of commonly assigned, co-pending application Ser. No. 10/667,290, filed September 18, 2003, which is a Divisional of Ser. No. 09/853,180, filed May 10, 2001, now U.S. Patent No. 6,756,481, which claims benefit of U.S. Provisional Patent Application No. [[no.]] 60/203,426, filed May 10, 2000, each of which is incorporated herein by reference in its entirety.

- 3) Please replace paragraph [0014] at page 4 with the following amended paragraph:

[0014] Kits are provided comprising such a polypeptide and: a compartment comprising the polypeptide; a compartment comprising an IL-12R[[□]]^{g1} polypeptide; a compartment comprising a p40, p19, or p40/p19 polypeptide; or instructions for use or disposal of reagents in the kit.

- 4) Please replace paragraph [0035] at pages 13-14 with the following amended paragraph:

[0035] Binding compositions specific for human p19 can be prepared by immunization with an antigenic segment or fragment of p19. These binding compositions encompass polyclonal antibodies, monoclonal antibodies, humanized antibodies, antibody fragments, e.g., an Fab, Fv, or F(ab')₂ fragment, diabodies, single chain antibodies,

bifunctional antibodies, and peptide mimetics of an antibody. Regions of increased antigenicity of human p19 include, e.g., amino acids 16-21; 57-69; 72-81; 136-140; 143-146; 151-154; and 135-164, of SEQ ID NO:6, according to analysis by Parker, *et al.* (1986) *Biochemistry* 25:5425-5432 and Welling, *et al.* (1985) *FEBS Lett.* 188:215-218, optionally with use of software from Vector NTI® Suite bioinformatics software package (Informax, Inc., Bethesda, MD).

5) Please replace paragraph [0082] at page 27 with the following amended paragraph:

[0082] This invention also contemplates the use of derivatives of a DCRS5 other than variations in amino acid sequence or glycosylation. Such derivatives may involve covalent or aggregative association with chemical moieties. These derivatives generally fall into three classes: (1) salts, (2) side chain and terminal residue covalent modifications, and (3) adsorption complexes, e.g., with cell membranes. Such covalent or aggregative derivatives are useful as immunogens, as reagents in immunoassays, or in purification methods such as for affinity purification of a receptor or other binding molecule, e.g., an antibody. For example, a cytokine ligand can be immobilized by covalent bonding to a solid support such as cyanogen bromide activated Sepharose® gel filtration matrix, by methods which are well known in the art, or adsorbed onto polyolefin surfaces, with or without glutaraldehyde cross linking, for use in the assay or purification of a cytokine receptor, antibodies, or other similar molecules. The ligand can also be labeled with a detectable group, e.g., radioiodinated by the chloramine T procedure, covalently bound to rare earth chelates, or conjugated to another fluorescent moiety for use in diagnostic assays.

6) Please replace paragraph [0172] at page 54 with the following amended paragraph:

[0172] An appropriate, e.g., glutathione S-transferase (GST), fusion construct is engineered for expression, e.g., in *E. coli*. For example, a mouse IGIF pGEX® plasmid is constructed and transformed into *E. coli*. Freshly transformed cells are grown, e.g., in

LB medium containing 50 µg/ml ampicillin and induced with IPTG (Sigma, St. Louis, MO). After overnight induction, the bacteria are harvested and the pellets containing the DCRS5 protein are isolated. The pellets are homogenized, e.g., in TE buffer (50 mM Tris-base pH 8.0, 10 mM EDTA and 2 mM Pefabloc® protease inhibitor) in 2 liters. This material is passed through a microfluidizer (Microfluidics, Newton, MA) three times. The fluidized supernatant is spun down on a Sorvall GS-3 rotor for 1 h at 13,000 rpm. The resulting supernatant containing the cytokine receptor protein is filtered and passed over a glutathione-Sepharose® gel filtration matrix column equilibrated in 50 mM Tris-base pH 8.0. The fractions containing the DCRS5-GST fusion protein are pooled and cleaved, e.g., with thrombin (Enzyme Research Laboratories, Inc., South Bend, IN). The cleaved pool is then passed over a Q-Sepharose® gel filtration matrix column equilibrated in 50 mM Tris-base. Fractions containing DCRS5 are pooled and diluted in cold distilled water, to lower the conductivity, and passed back over a fresh Q-Sepharose® gel filtration matrix column, alone or in succession with an immunoaffinity antibody column. Fractions containing the DCRS5 protein are pooled, aliquoted, and stored in the -70° freezer.